

Inventor(s): Andreas Pein

Invention: WATER-JET DEVICE FOR SEPARATING A BIOLOGICAL
STRUCTURE

Attorney's Docket Number: JAA208

Horst M. Kasper, his attorney
13 Forest Drive, Warren, N.J. 07059
Tel. (908)526 1717; Reg. No. 28559
Attorney's Docket No.: JAA208

**TRANSLATION OF ANNEXES TO THE INTERNATIONAL
PRELIMINARY EXAMINATION REPORT dated October 8, 2001**

Application No. : PCT/EP00/02994
Filing Date : April 4, 2000

Patent claims

1. Water jet device for separating of a biological structure, essentially comprising a pressure flow generator (1), an operatable control and automatic control unit (2) and a supply capillary (3) with a separating nozzle (14), wherein the separating jet exits from the separating nozzle (14), wherein the separating nozzle (14) is furnished with the nozzle channel (15) with a cylindrical section and wherein the separating nozzle (14) is disposed at the distal end of the supply capillary (3),

wherein the separating nozzle (14), as is known in principle is disposed fixedly positioned and coaxial to the supply capillary (3) and wherein the nozzle channel (15) is furnished with at least one twisted groove (16) and wherein the number of the twisted grooves (16) and the diameter and the length of the nozzle channel (15) are placed in such a ratio to each other that the separating jet subjected to pressure is rotated.

2. Water jet device according to claim 1 wherein the slope of the spiral flutes (16) is dimensioned larger than the diameter of the nozzle channel (15).

3. Water jet device according to claim 2 wherein the spiral flutes (16) exhibit a rounded cross-sectional shape.

4. Water jet device according to claim 1 wherein the supply capillary (3) is equipped with one or several additional separating tools for mechanical working of the biological structure in the region of the separating nozzle (14) of the supply capillary (3).

5. Water jet device according to claim 1 wherein the supply capillary (3) is made out of a current conducting material and is connectable to a high frequency current supply device.